

AMENDMENTS TO THE CLAIMS

1.-27. **(Canceled)**

28. **(Currently amended)** A method of reducing loss of nitrogen from soil exposed to waste from an animal comprising:

identifying the animal whose waste is applied to said soil;

introducing ~~a treatment substance selected from the group consisting of a urease inhibitor compound and~~ a nitrification inhibitor compound internally to said animal; and

excreting waste from the animal onto the soil, wherein the waste acts as a carrier so that the nitrification inhibitor ~~treatment substance~~ affects the conversion of nitrogen containing compounds once the waste is excreted from the animal, thereby reducing loss of nitrogen from the soil as compared to loss of nitrogen from a soil exposed to waste from the animal if said nitrification inhibitor ~~were treatment substance~~ was not introduced.

29. **(Canceled)**

30. **(Previously presented)** A method as claimed in claim 28 wherein said treatment substance is introduced to the animal over an extended time period.

31.-36. **(Canceled)**

37. **(Previously presented)** A method as claimed in claim 28 wherein the animal waste is urine.

38.-40. **(Canceled)**

41. **(Currently amended)** A method as claimed in claim 40 28 wherein the nitrification inhibitor is 3,4-dimethylpyrazole phosphate (DMPP).

42. **(Currently amended)** A method as claimed in claim 40 28 wherein the nitrification inhibitor is dicyandiamide (DCD).

43. **(Canceled)**

44. **(Previously presented)** The method as claimed in Claim 28, wherein the treatment substance further comprises a beneficial compound that enhances the soil immobilization of nitrogen containing compounds.

45. **(Previously presented)** A method as claimed in claim 44 wherein the beneficial compound enhances the growth of soil microorganisms.

46. **(Previously presented)** A method as claimed in claim 44 wherein the beneficial compound is a complex carbon source.

47. **(Previously presented)** A method as claimed in claim 44 wherein the beneficial compound is a tannin.

48. **(Previously presented)** A method as claimed in claim 28, wherein the treatment substance is eliminated along with the animal waste onto the soil.

49. **(Previously presented)** A method as claimed in claim 28, wherein the treatment substance is administered orally to an animal.

50. **(Previously presented)** A method as claimed in claim 49, wherein the treatment substance is administered by drench.

51. **(Previously presented)** A method as claimed in claim 49, wherein the treatment substance is administered by incorporating into animal feed.

52. **(Previously presented)** A method as claimed in Claim 49, wherein the treatment substance is administered by incorporating into water.

53. **(Withdrawn)** A method as claimed in claim 49 wherein the treatment substance is introduced by a ruminal bolus.

54. **(Withdrawn)** A method as claimed in claim 49 wherein the treatment substance is introduced by a rumen-stable delivery device.

55. **(Withdrawn)** A method as claimed in claim 54 wherein the treatment substance is introduced by an encapsulation system.

56. **(Withdrawn)** A method as claimed in claim 28, wherein the treatment substance is introduced into an animal's bladder.

57. **(Withdrawn)** A method as claimed in claim 56 wherein the treatment substance is introduced by a preformed matrix.

58. **(Withdrawn)** A method as claimed in claim 57 wherein the matrix is silicone.

59. **(Withdrawn)** A method as claimed in claim 56, wherein the treatment substance is introduced by a carrier that has a lower specific gravity than urine.

60. **(Withdrawn)** A method as claimed in claim 28 wherein the treatment substance is introduced into said animal by a delivery device, wherein said treatment substance is contained within the inner core of the delivery device.

61. **(Withdrawn)** A method as claimed in claim 28 wherein the treatment substance is introduced by administering to said animal a delivery device impregnated with said treatment substance.

62. **(Withdrawn)** A method as claimed in claim 28, wherein said treatment substance is delivered by diffusion from a delivery device.

63. **(Withdrawn)** A method as claimed in claim 28, wherein said treatment substance is delivered through dissolution of a delivery device.

64. **(Withdrawn)** A method as claimed in claim 28 wherein the treatment substance is introduced by sustained, slow release of said treatment substance.

65. **(Withdrawn)** A method as claimed in claim 28 wherein the treatment substance is introduced by a delivery device that includes an electrochemical cell.

66. **(Withdrawn)** The method as claimed in Claim 28, wherein the treatment substance is introduced internally to said animal by a catheter.

67. **(Withdrawn)** A method as claimed in claim 28, wherein the treatment substance is administered within a material selected from the group consisting of lipid-based coatings, wax coatings and polymer matrices.

68. **(New)** A method as claimed in Claim 28, wherein the method reduces the emission of green-house gasses from the animal waste.